## Docket No. 106008.02

## **CLAIMS**

## 1. A process for producing a sulfamoyl compound of the formulae (1):

wherein

 $R^1$  and  $R^2$  are each independently  $C_{1\text{--}4}$  alkyl, or  $R^1$  and  $R^2$  together are  $C_{4\text{--}6}$  alkylene or  $C_{4\text{--}6}$  alkyleneoxy,

Y is H, halogen,  $C_{1-8}$  alkyl,  $C_{1-4}$  alkoxy,  $C_{1-8}$  alkylthio,  $C_{1-8}$  haloalkyl,  $C_{1-8}$  haloalkylthio, or  $C_{1-8}$  haloalkylthio,

A is

B is A-1 to A-10, or

W is a chemical bond or O,

V is O or S,

D, E, F and G are each independently N, CR7, CR8, CR9 or CR10, and

 $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$ ,  $R^7$ ,  $R^8$ ,  $R^9$ ,  $R^{10}$  and  $R^{11}$  are each independently H,  $C_{1-8}$ , alkyl,  $C_{3-8}$ , cycloalkyl, C<sub>2-8</sub> alkenyl, C<sub>5-8</sub> cycloalkenyl, C<sub>2-8</sub> alkynyl, C<sub>1-8</sub>, alkoxy, C<sub>3-8</sub> cycloalkyloxy, C<sub>5-8</sub> cycloalkenyloxy, C<sub>2-8</sub> alkenyloxy, C<sub>2-8</sub> alkynyloxy, C<sub>1-8</sub> alkylthio, C<sub>3-8</sub> cycloalkylthio, C<sub>5-8</sub> cycloalkenylthio,  $C_{2-8}$  alkenylthio,  $C_{2-8}$  alkynylthio,  $C_{1-8}$  haloalkyl,  $C_{1-8}$  haloalkoxy,  $C_{1-8}$ haloalkylthio, C<sub>2-8</sub> haloalkenyl, C<sub>2-8</sub> haloalkenyloxy, C<sub>2-8</sub> haloalkenylthio, C<sub>2-8</sub> haloalkynyl, C<sub>2-8</sub> haloalkynyloxy, C<sub>2-8</sub> haloalkynylthio, phenyl which may be substituted (the kinds of substituent include halogen, C<sub>1-8</sub> alkyl, C<sub>1-8</sub> haloalkyl, C<sub>1-8</sub> alkoxy, C<sub>1-8</sub> haloalkoxy, C<sub>1-8</sub> alkylthio, C<sub>1-8</sub> haloalkylthio, C<sub>1-6</sub> alkylsulfoxy, C<sub>1-6</sub> alkylsulfonyl, CN, NO<sub>2</sub> and C<sub>1-6</sub> alkoxycarbonyl, the number of the substituents is 1 to 5, and the substituents may be identical or different), phenyl C<sub>1-4</sub> alkyl which may be substituted, benzylthio which may be substituted, benzyloxy which may be substituted, phenoxy  $C_{1-4}$  alkyl which may be substituted, phenoxy which may be substituted, phenylthio C<sub>1-4</sub> alkyl which may be substituted, phenylthio which may be substituted, benzoyl which may be substituted, benzoyl C<sub>1-4</sub> alkyl which may be substituted, benzoyloxy which may be substituted, benzoyloxy C<sub>1-4</sub> alkyl which may be substituted, naphthyl which may be substituted, 5 or 6 membered heterocyclic ring which may be substituted, C<sub>1-8</sub> hydroxyalkyl, C<sub>1-8</sub> hydroxyhaloalkyl, C<sub>1-6</sub> alkoxy C<sub>1-4</sub> alkyl, C<sub>1-6</sub> haloalkoxy C<sub>1-4</sub> alkyl, C<sub>1-6</sub> haloalkylthio C<sub>1-4</sub> alkyl, C<sub>1-10</sub> dialkoxy C<sub>1-4</sub> alkyl,  $C_{1-3}$  alkylenedioxy  $C_{1-4}$  alkyl,  $C_{1-6}$  alkylthio  $C_{1-4}$  alkyl,  $C_{1-10}$  dialkylthio  $C_{1-4}$  alkyl,  $C_{1-3}$ alkylenedithio  $C_{1-4}$  alkyl,  $C_{1-6}$  alkoxycarbonyl,  $C_{1-6}$  haloalkoxycarbonyl,  $C_{1-6}$  alkoxyoxalyl, CHO, CO<sub>2</sub>H, C<sub>1-6</sub> alkoxycarbonyl C<sub>1-4</sub> alkyl, C<sub>1-6</sub> haloalkoxycarbonyl C<sub>1-4</sub> alkyl, NH<sub>2</sub>, C<sub>1-6</sub> alkylamino, C<sub>1-6</sub> alkylcarbonylamino, C<sub>1-6</sub> alkylcarbonylamino C<sub>1-4</sub> alkyl, C<sub>1-6</sub> haloalkylcarbonylamino, C<sub>1-6</sub> haloalkylcarbonylamino C<sub>1-4</sub> alkyl, C<sub>1-6</sub> alkoxycarbonylamino, C<sub>1-6</sub> alkoxycarbonylamino C<sub>1-4</sub> alkyl, C<sub>1-6</sub> alkylsulfonylamino, C<sub>1-6</sub> alkylsulfonylamino C<sub>1-4</sub> alkyl, C<sub>1-6</sub> haloalkylsulfonylamino, C<sub>1-6</sub> haloalkylsulfonylamino C<sub>1-4</sub> alkyl, C<sub>1-6</sub> dialkylamino, C<sub>1-6</sub> dialkylamino C<sub>1-4</sub> alkyl, C<sub>1-6</sub> dialkylaminocarbonyl, C<sub>1-6</sub> dialkylaminocarbonyl C<sub>1-4</sub> alkyl, C<sub>2-6</sub> alkyleneimino, C<sub>2-6</sub> alkyleneimino C<sub>1-4</sub> alkyl, C<sub>2-6</sub> alkyleneiminocarbonyl, C<sub>2-6</sub> alkyleneiminocarbonyl C<sub>1-4</sub> alkyl, C<sub>1-6</sub> alkylcarbonyl, C<sub>1-6</sub> alkylcarbonyloxy, C<sub>1-6</sub> haloalkylcarbonyloxy, C<sub>1-6</sub> alkylcarbonyl C<sub>1-4</sub> alkyl, C<sub>1-6</sub> haloalkylcarbonyloxy C<sub>1-4</sub> alkyl, C<sub>1-6</sub> haloalkylcarbonyloxy C<sub>1-4</sub> alkyl, C<sub>1-6</sub> haloalkylcarbonyloxy C<sub>1-4</sub> alkyl, hydroxyimino C<sub>1-4</sub> alkyl, C<sub>1-6</sub> alkoxyimino C<sub>1-4</sub> alkyl, C<sub>1-6</sub> alkylcarbonyloxyimino C<sub>1-4</sub> alkyl, C<sub>1-6</sub> alkylsulfoxy, C<sub>1-6</sub> haloalkylsulfoxy, C<sub>1-6</sub> alkylsulfoxy, C<sub>1-6</sub> haloalkylsulfoxy, C<sub>1-6</sub> alkylsulfonyl, C<sub>1-6</sub> alkylsulfonyl, C<sub>1-6</sub> alkylsulfonyl, C<sub>1-6</sub> alkylsulfonyl, C<sub>1-6</sub> alkylsulfonyl, C<sub>1-6</sub> alkylsulfonyl, C<sub>1-6</sub> alkylsulfonyloxy, C<sub>1-6</sub> haloalkylsulfonyloxy, C<sub>1-6</sub> haloalkylsulfonyloxy, C<sub>1-6</sub> haloalkylsulfonyloxy, C<sub>1-6</sub> haloalkylsulfonyloxy, C<sub>1-6</sub> haloalkylsulfonyloxy, C<sub>1-6</sub> haloalkylsulfonyl, C<sub>1-6</sub> haloa

which comprises reacting a compound of the formula (2)

wherein A has the same meaning as defined above, with a compound of the formula (3)

$$\begin{array}{cccc}
O & & & & & & & & & \\
A - \ddot{S} & & & & & & & & \\
\ddot{O} & N - N & & & & & & \\
O & N - R^1 & & & & & & \\
& & R^2 & & & & & & \\
\end{array}$$
(3)

wherein  $R^1$ ,  $R^2$  and Y have the same meanings as defined above, and X is a halogen; reacting a compound of the formula (4)

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$$O \underset{N}{\overset{Y}{\longrightarrow}} NH$$
(4)

wherein B and Y have the same meanings as defined above,

with a compound of the formula (5)

$$R^{1}R^{2}NSO_{2}X (5)$$

wherein R1 and R2 have the same meanings as defined above and X is halogen; or a compound of the formula (6)

$$\begin{array}{cccc}
O & & & & & & & & \\
A - \ddot{S} & & & & & & & \\
\ddot{O} & & & & & & & & \\
O & & & & & & & & \\
O & & & & & & & & \\
O & & & & & & & \\
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O$$

wherein  $R^1$ ,  $R^2$ , A and Y have the same meanings as defined above, with an oxidizing agent.